

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 April 2001 (12.04.2001)

PCT

(10) International Publication Number
WO 01/25251 A1

(51) International Patent Classification⁷: C07H 21/04,
C12P 21/06, C12N 15/09, 15/00

Mohamed [US/US]; 126 East Lincoln Avenue, Rahway,
NJ 07065-0907 (US). AZZOLINA, Barbara [US/US];
126 East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(21) International Application Number: PCT/US00/27056

(22) International Filing Date:
29 September 2000 (29.09.2000)

(74) Common Representative: MERCK & CO., INC.; 126
East Lincoln Avenue, Rahway, NJ 07065-0907 (US).

(25) Filing Language: English

(81) Designated States (*national*): CA, JP, US.

(26) Publication Language: English

(84) Designated States (*regional*): European patent (AT, BE,
CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC,
NL, PT, SE).

(30) Priority Data:
60/157,580 4 October 1999 (04.10.1999) US

(71) Applicant (*for all designated States except US*): MERCK
& CO., INC. [US/US]; 126 East Lincoln Avenue, Rahway,
NJ 07065-0907 (US).

Published:
— With international search report.

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): EL-SHERBEINI,

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



WO 01/25251 A1

(54) Title: MRAY GENE AND ENZYME OF *PSEUDOMONAS AERUGINOSA*

(57) Abstract: Polynucleotides and polypeptides of *Pseudomonas aeruginosa* Mray, an enzyme involved in bacterial cell wall biosynthesis, are provided. The recombinant Mray enzyme is catalytically active in the first step of the membrane cycle of peptidoglycan biosynthesis. Also provided are proteins encoded by the sequences, host cells expressing the recombinant enzyme, and probes and primers.